

## **ABSTRACT**

A probe for detecting an agonist or an antagonist to a nuclear receptor, in which, at least, a ligand-recognition site containing a 5 ligand-binding domain of the nuclear receptor is connected with a binding-responsive site containing a peptide chain that specifically binds to a coactivator-binding site in the ligand-binding domain by a flexible linker to construct a fusion structure [ligand-recognition site/linker/binding-responsive site], and two reporters are connected with 10 the respective ends of the fusion structure.